U.S. House of Representatives
Committee on Science
Subcommittee on Research

Nanotechnology: Where Does the U.S. Stand?

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Statement of Chairman Bob Inglis

Good morning, and welcome to our second hearing on nanotechnology. Last month, the Research Subcommittee heard from experts about examples of successful partnerships between government and the public and private sectors and discussed barriers to future advancement. They also cited the National Nanotechnology Initiative (NNI) as a successful program that is helping advance the nanotechnology industry.

Also last month, the President's Council of Advisors on Science and Technology (PCAST) released a report on the state of, and outlook for, nanotechnology in the U.S. On the whole, the report is very encouraging, and am I glad to see Mr. Floyd Kvamme, the Co-Chair of PCAST, as one of our witnesses here today. The good news is that the United States still leads the world by most metrics, including funding, patents, and scientific publications. But I find it troubling that other countries are catching up, and not just in funding. I hope we can talk today about ways the U.S. can maintain its status as a world leader in these emerging technologies.

I've said it before: I'm not a scientist by background. My miniscule knowledge of nanotechnology (pun intended) is a result of preparing for hearings such as this, and it is driven by the realization that this technology will quickly become as commonplace as the Internet. Nanotechnology is already changing the products we use and has the potential to revitalize our manufacturing base. It promises to impact virtually every field—with applications in fields from energy to defense to health care to transportation.

Just yesterday, we rolled-out the House Hydrogen and Fuel Cell Caucus, with the ultimate goal of leading us to a national hydrogen economy. I'm excited to hear that efforts are already underway to use nanotechnology to improve hydrogen production, storage and fuel cells. The development of this technology is truly amazing and holds great promise. As many of you know, a hydrogen economy is an issue near to my heart, as is the education of our nation's children in math and science. It is imperative that we encourage and nurture a future generation of scientists to help us maintain our prominence in nanotechnology and in other critically important scientific fields.

This is why today's hearing is so important. As the PCAST report shows, the U.S. is currently ahead of the nanotechnology curve, but other nations continue to invest more and more time, energy and money in their nanotechnology efforts. If we pause even to glance over our shoulders, we will see them on the horizon, several of whom are already on our heels and pushing to take the lead. This possibility is no small matter. Our last stronghold of competition is innovation, and the United States can not afford to lose the lead on this technology.

Today, I hope our witnesses will address our current nanotechnology position relative to other countries, from an R&D perspective and from a business perspective; discuss where our greatest opportunities for breakthroughs are and what the potential impacts may be in the near-term and the long-term. Furthermore, we hope to hear what barriers exist to commercializing nanotechnology, how we can overcome them, and the federal government's role in the process.

I look forward to hearing your testimony.